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Date: January 27, 2003

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UNITED STATES PATENT AND TRADEMARK OFFICE To:

JAN 2 7 2003

TECHNOLOGY CENTER 2800

Attention:

Examiner Guillermo Perez

Group 2834

1-703-746-4179 Fax No :

Re: Applicant:

Yoshio SATO DRIVING UNIT OF A WELDING EQUIPMENT

For: 09/533 554 Serial No.:

8275 Conf. No.:

March 22, 2000 Filed:

OPS C486 Our Ref.:

Attached is a Response to the Final Rejection dated November 25, 2002.

Kindly notify Examiner Perez at (703) 306-5443 as soon as this document has been received for purposes of letting him know that this document is available for his consideration.

Thank you.

Brian R. Tumm

/km

Encls.: Response After Final Rejection

rian Tumm

CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that this paper and the above-listed enclosures (if any) is being facsimile transmitted to the Patent and Trademark Office on the date shown below.

Susan G. Padgham Date January 27, 2003

RESPONSE UNDER 37 CFR 1.116 EXPEDITED PROCEDURE IN THE U.S. PATENT AND TRADEMARK OFFICE January 27, 2003

Applicant(s): Yoshio SATO

DRIVING UNIT OF A WELDING EQUIPMENT

Group: 2834 Serial No.: 09/533 554

Confirmation No.: 8275

Examiner: Perez Filed: March 22, 2000

International Application No.: N/A

International Filing Date: N/A

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Atty. Docket No.: OPS C486

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Box AF Assistant Commissioner for Patents Washington, DC 20231

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RESPONSE AFTER FINAL REJECTION

Sir:

After considering the Office Action mailed November 25, 2002 and detailed telephone interviews with Examiner Perez on January 22, 2003 and January 23, 2003, Applicant responds as follows.

Applicant requests reconsideration of the finality of the rejection set forth in the Office Action, as well withdrawal of the rejection.

In the previous Response, Applicant amended Claims 3-5 by deleting the word "substantially" from the phrase "wherein the screw shaft is substantially integrally provided on the rotary shaft". This amendment merely clarifies that the screw shaft is, without question, integral with the rotary shaft.

Applicant's amendment does not require further search or consideration. Line 4 of independent Claim 1, which was examined and allowed in the November 25, 2002 Office Action, includes the phrase "a screw shaft coaxially fixed with a rotary shaft". Thus, the feature of the screw shaft being integral with or fixed to the rotary shaft was already considered in a previous Office Action. Therefore, Applicant Serial No. 09/533 554 - Page 2

believes the amendment to Claims 3-5 deleting the word "substantially" raises no new issue that was not previously addressed or considered by the Examiner.

For the above reasons, Applicant requests withdrawal of the "finality" of the November 25, 2002 Office Action.

The rejection of Claims 3-5 under 35 USC § 103 as being unpatentable over Wolfbauer, U.S. Patent No. 5 099 161 in view of Lewis, U.S. Patent No. 2 030 260 has been considered.

Wolfbauer discloses a driving unit of a welding equipment including a force application shaft 32 of a linear actuator which is moved in a linear direction. Wolfbauer has a similar function to Applicant's invention. Wolfbauer, however, does not have Applicant's claimed structure and therefore a combination including Lewis is required in an attempt to produce Applicant's claimed invention.

Lewis is relied upon to disclose a screw shaft integrally provided on a rotary shaft by fixing the screw shaft to the rotary shaft of the motor. At page 2, lines 9-16, Lewis recites the gear shaft 32 rigidly connected by means of a sleeve coupling 44 to shaft 20. It is unclear to Applicant that the sleeve coupling 44 provides a friction force as recited in Applicant's Claim 5.

More importantly, there is no motivation, absent Applicant's specification, to combine features from Lewis with the linear actuator of Wolfbauer.

Lewis discloses a motorized reduction gear assembly. There is no linear movement of any of the members of Lewis. Lewis discloses driving a rotating shaft 20, which rotates a reduction gear shaft 32 that carries a worm 33 having threads. The threads of worm 33 engage a worm wheel 34 which is keyed to a driven shaft 35. Thus, powering of the motor rotates the rotary shaft 20, which in turn rotates the driven shaft 35. Due to the different diameters of the shafts and the worm 33, a speed reduction of the shaft rotation speed occurs. Since Lewis does not disclose linear movement of any member, it is

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unclear why one having ordinary skill in the art would look to the reduction gear assembly of Lewis to modify any linear actuator, much less in a manner designed to result in Applicant's claimed invention.

For the above reasons, Claims 3-5 are believed allowable over the combination of Wolfbauer and Lewis.

Applicant appreciates the allowance of Claims 1, 12-15 and 20. Favorable reconsideration of this application and additional allowance of Claims 3-5 is respectfully requested.

Respectfully submitted,

Brian R. Tumm

BRT/km

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Encl: None

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